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EXAMINER

HSIEH, SHIH WEN

| ART UNIT | PAPER NUMBER |
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2861

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/820,427

Applicant(s)

NELSON ET AL.

Examiner

Shih-wen Hsieh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7, 9, 11-14, 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 10, 15, 17-19 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 15 October 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Response to Amendment

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 3, 10, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlotta (US Pat. No. 5,400,060) in view of Sneed (US Pat. No. 5,521,002).

In regard to:

Claims 1, 15 and 18 (15 and 18 are independent process claims):

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Carlotta teaches:

A laminate (28, figs. 2 and 3) for sealing nozzles on print cartridges and process in sealing the cartridge, comprising:

a base film (30, figs. 2 and 3), refer to col.3, lines 42-46;

a hot-melt layer adhesively (32, figs. 2 and 3) bonded thereto, the laminate seals the print cartridge nozzles prior to use, refer to col. 2, lines 31-43; col. 3, lines 42-52.

Carlotta further teaches the laminated seal (28) having a layer (30, figs. 2 and 3) on top of the low temperature melt layer (32), the layer (30) is made of plastic material, refer to col. 3, lines 42-44.

The device of Carlotta DIFFERS from claims 1, 15 and 18 in that it does not teach:

a moisture retardant base film.

As discussed above, the layer (30) functioned as a base film is made of a plastic material, such as polyester.

Sneed teaches a "matte type ink jet film", in which a matte type ink receiving media has a substrate made of such as polyester which is humidity resistant, refer to col. 3, line 60 to col. 4, line 4.

Therefore it would have been an obvious matter to understand from the teaching of Sneed that the plastic material such as polyester as taught by Carlotta is a humidity resistant material, and the term "humidity resistant" has a meaning, which is equivalent to the meaning of the term "moisture retardant".

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Further for the process claims 15 and 18, please refer to fig. 4 and col. 4, line 3+, for making the seal, cutting the seal and heating the seal.

Claim 3:

Carlotta further teaches:

wherein the base film is a polyester, refer to col. 3, lines 42-44.

Claim 10:

A print cartridge with sealed nozzles, comprising:

A print cartridge having nozzles through which ink is jetted; and

A hot-melt layer adhesively bonded to the print cartridge and sealing the nozzles, wherein the hot melt layer is laminated with a moisture retardant base film.

Rejection:

This claim is rejected on the basis as set forth for claim 1 discussed above.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carlotta in view of Sneed as applied to claim 1 above, and further in view of Iwasaki (US Pat. No. 6,034,712).

In regard to:

Claim 2:

The device of Carlotta as modified in view of Sneed DIFFERS from claim 2 in that it does not teach:

wherein the base film is a polyolefin.

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Iwasaki teaches an "Exposure apparatus and image forming machine including it", in which a microcapsule coated sheet (37, fig. 3) functioned as a "photo sensitive recording medium", the "photo sensitive recording medium" has a layer (31, fig. 3) is made of moisture resistant material, such material is as Amorphous polyolefin, refer to col. 12, lines 45-51.

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device of Carlotta as modified in view of Sneed to use a polyolefin as the base material (30) in Carlotta's invention as taught by Iwasaki for the purpose of maintaining a stability of the sensitivity of the photosensitive recording medium so that the image quality is maintained at a high grade.

4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carlotta in view of Sneed as applied to claim 18 above, and further in view of Hartz (US Pat. No. 4,777,930).

The device of Carlotta as modified in view of Sneed DIFFERS from claim 19 in that it does not teach:

wherein the moisture retardant material is a pouch material.

Hartz teaches typical pouch material includes moisture resistant polymer film, refer to col. 1, lines 48-50.

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a pouch material as the moisture retardant

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material as taught by Hartz as a design choice, since a pouch material with moisture retardant property will serve the same purpose as a polyester material having the same moisture retardant property.

5. Claims 4, 8 and 17 (process) are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlotta in view of Sneed as applied to claims 1, 6 and 15 above and further in view of Karita et al. (US Pat. No. 5,850,238).

The device of Carlotta as modified in view of Sneed DIFFERS from claims 4, 8 and 17 in that it does not teach:

wherein the laminate additionally seals electrical contacts and leads on print cartridges against corrosion (claim 4).

wherein the print cartridge has electrical contacts and leads and further including positioning the cut tape over the electrical contacts and leads as well as the nozzles and heat staking the tape over the electrical contacts and leads as well as the nozzles (claim 17).

Karita et al. teach a print head is sealed by a sealing member (3, fig. 18) that seals not only ejection outlets but also protects electric contacts (201, fig. 18) and leads of the print head and the process of sealing the electric contacts and leads, refer to col. 15, lines 23-45.

Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device of Carlotta as modified in view

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of Sneed to extend Carlotta's laminated seal to also seal the electric contacts as taught by Karita et al. for the purpose of protecting the electric contacts and leads.

6. Claims 22 and 24 contain the trademark/trade name Nucrel and Tyvek and are used for the base film. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a base film is coated with Nucrel and a base film is made of Tyvek and, accordingly, the identification/description is indefinite.

7. Claim 23 claims the base film is a Bicolor LBW film. However, Bicolor LBW is produced by Mobil Chemical. Therefore, claim 23 is rejection^{on} the basis as set forth for claims 22 and 24 discussed above.

Allowable Subject Matter

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8. The indicated allowability of claim 10 is withdrawn. Because its recitations are similar to those in claim .

9. Claims 5-7, 9-14 and 20-21 are allowed.

10. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

In regard to:

Claim 5:

The primary reason for the allowance of claim 5 is the inclusion of the limitations of a non-woven thin base film having crevices therein and a moisture retardant hot-melt layer, said hot-melt flow into the crevices in the base film and mechanically bonds the film and hot-melt layer together. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes the claim allowable over the prior art.

Claims 6, 7 and 11-14:

The primary reason for the allowance of claims 6, 7 and 11-14 is the inclusion of the limitation of the hot melt layer bonds the print cartridge to a package containing the

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print cartridge. It is this limitation found in each of the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Claim 9:

The primary reason for the allowance of claim 9 is the inclusion of the limitation of the hot melt is adhesively bonded to a film having an adhesion with the hot melt that is greater than the adhesion between the hot melt and the print cartridge. It is this limitation found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claim 16:

The primary reason for the allowance of claim 16 is the inclusion of the method step of the tape has a free end and capturing the free end in pouch material and flow wrapping the pouch material around the print cartridge. It is this step found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claims 20 and 21:

The primary reason for the allowance of claims 20 and 21 is the inclusion of the method step of block coating heat stakable material with hotmelt. It is this step found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Response to Arguments

13. Applicant's arguments filed on April 1, 2003 have been fully considered but they are not persuasive.

Carlotta teaches the base film is made of plastic material such as polyester. Because Carlotta does not further specify whether such polyester is moisture retardant or not, Examiner is therefore seeking a reference, which teaches a subject matter that is made of polyester and this polyester is moisture retardant. Sneed actually teaches a

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base material, which is humidity resistant. Humidity resistant is the same as moisture retardant, however, expresses in different term. Applicants argue the properties of a plastic material within a given material classification, such as polyester, may vary over a wide range, depending on the way in which the plastic material is formed, and

Applicants also include in their arguments documents related to the characteristics of polyester material, which indicate polyester is water-permeable or semi-permeable to water. For this reason, in order to specify a plastic material, such as polyester, one must specify one or more properties of the plastic material in addition to specifying its material composition. To this end, Examiner respectfully disagrees. Because, first, the documents furnished by the Applicants are special examples, they can not represent all of the polyester material. The good example is the Sneed reference used in the office action, in which the base material is made of polyester, which is a humidity resistant material. Secondly, claim 1 is only recited as "a moisture retardant base film" without further specifying more information regarding to this moisture retardant base film.

Although the claim is interpreted in light of the specification, limitations from the specification are not read into the claim, *In re Van Guens*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.1993). Based on this, Examiner contends using Sneed reference to combine with Carlotta reads on claim 1. Regarding to Applicants arguments in their page 4 that the Examiner has pointed to the following disclosure in Sneed for the proposition that all types of polyester are "humidity resistant". Examiner respectfully disagrees. As discussed above, some polyester is mater-permeable or semi-water permeable (furnished by the Applicants), the polyester material proposed by Sneed is

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however, humidity resistant. Sneed's polyester, to Examiner's understanding is not all of the polyester, also, is of a special kind, which is humidity resistant. Applicants still argue in their page 4 that one or more properties of the plastic material in addition to specifying its material composition will have to be given in order to specifying a plastic material. Similarly to the discussion above, Claim 1 only recites "a moisture retardant base film". Although the claim is interpreted in light of the specification, limitations from the specification are not read into the claim, *In re Van Guens*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.1993). Another US reference 4,503,111 teaches a hydrophobic substrate such as plastic film employed in the production of transparencies generally have hydrophobic (water resistance) surfaces. These substrates include such well known materials as cellulose acetate and polyesters; e.g., polyethylene terephthalate, as well as other similar commonly used polymeric materials that can be formed into colorless, transparent films, refer to col. 1, line 63 to col. 2, line 3. This reference is enclosed for your information. So long as Sneed provides a humidity resistant base material, other such as for archival storage of master prints, etc. are its intended use, which carries less patentable weight, *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding to claim 2, Iwasaki reference, before going into details, the bottom line of the base film is "moisture retardant". Then Iwasaki teaches a base film or substrate (31) which is moisture resistant. Therefore, Examiner contends this base film can also apply to the instant invention as the base film in making the laminate to seal nozzles on print cartridge. As to the motivation of combining, "maintaining a stability of the sensitivity of the photosensitive recording medium so that the image quality is

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maintained at a high grade" is an extra feature other than the base film or substrate can be moisture resistant. It is therefore, so long as the base film presents moisture resistant, and the material of the base film is such as polyester or polyolefin, this meets the limitation in the claim. Others features that are other than moisture retardant taught by the teaching references such as Sneed or Iwasaki are their intended use. Although as Applicants argue that it is irrelevant to the instant application, it is however, those teachings have a common point, i.e., the base film or the substrate has the characteristics of "humidity resistant" or "moisture resistant", which in fact are the same as "moisture retardant" as in the instant application, only expressed in different terms. Therefore, using those references in combining with Carlotta reveals a laminate having a base film, which is "humidity resistant" or "moisture resistant".

Regarding to claim 19, Hartz reference, similar to the discussion above, what Hartz's teaching is a pouch material including aluminum foil, heat resistant polyester film, paper/polymer laminates, and other moisture resistant polymer film. Still, Hartz's teaching meets the bottom line, the material is "moisture resistant". Others are its intended use.

As a conclusion to the selection of materials, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select a known material to apply to their invention, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use so as to meet a special purpose, e.g., moisture retardant as proposed in the instant application, refer to MPEP 2144.07.

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Regarding to Karita et al.'s reference, per fig. 18, Examiner contends the electric contact (201) is sealed by the tape (3), since according to the configuration, (201) is under the cover of the seal tape (3). After the insertion of the connector projection (4003), the contact pads (2011) in the projection will contact with the electric contact (201), the opening (1700) is sealed by the tape (3), electric contact (201) is inside or under the tape (3). Therefore, it can be considered the electric contact (201) is sealed by the tape (3), although the tape (3) does not directly contact with the electric contact (201), it is however, under the cover of the tape (3).


Regarding to claims 22-23, these claims still involve with the selection of materials Examiner will maintain the rejections and the reasons are as those discussed above.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 703-305-4961. The examiner can normally be reached on 7:30AM -5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, B. Fuller can be reached on 703-308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 and 703-872-9319 for regular communications and 703-308-5841 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Shih-wen Hsieh
Examiner
Art Unit 2861

SWH


June 3, 2003